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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/355,210	07/12/00	GIORGI R	515-4167

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EXAMINER	
LUKTON, D	

ART UNIT	PAPER NUMBER
1653	13

DATE MAILED: 04/26/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/355,210	Giorgi
Examiner	**Art Unit**
David Lukton	1653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) [X] Responsive to communication(s) filed on Apr 18, 2001

2a) [ ] This action is **FINAL.** 2b) [X] This action is non-final.

3) [ ] Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) [X] Claim(s) 1-14 is/are pending in the applica

4a) Of the above, claim(s) 4 and 10-14 is/are withdrawn from considera

5) [ ] Claim(s) _____ is/are allowed.

6) [X] Claim(s) 1-3 and 5-9 is/are rejected.

7) [ ] Claim(s) _____ is/are objected to.

8) [ ] Claims _____ are subject to restriction and/or election requirem

Application Papers

9) [ ] The specification is objected to by the Examiner.

10) [ ] The drawing(s) filed on _____ is/are objected to by the Examiner.

11) [ ] The proposed drawing correction filed on _____ is: a) [ ] approved b) [ ] disapproved.

12) [ ] The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) [ ] Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) [ ] All b) [ ] Some* c) [ ] None of:

1. [ ] Certified copies of the priority documents have been received.
2. [ ] Certified copies of the priority documents have been received in Application No. _____.
3. [ ] Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) [ ] Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) [ ] Notice of References Cited (PTO-892)

16) [ ] Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) [X] Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5

18) [ ] Interview Summary (PTO-413) Paper No(s). _____

19) [ ] Notice of Informal Patent Application (PTO-152)

20) [ ] Other:

Applicants' election of Group I with traverse is acknowledged, as is the elected specie (the compound of example 38)

Applicants have continued to traverse the restriction requirement. The examiner will stipulate that applicants are correct, in those cases where the compounds at issue are novel. However, the examiner maintains that when compounds are known in the prior art, lack of unity is an appropriate characterization. Nevertheless, the method-of-use claims will be examined (along with the "method-of-making claims), to the extent that they are limited to novel compounds. The determination as to what is, and what is not novel is not complete at this time, however. The restriction is maintained at the present time. (Applicants are nevertheless encouraged to amend claims 10-13 to recite a "method-of-use", since this will have to be done anyway at a later time).

Claims 4 and 10-14 are withdrawn from consideration; claims 1-3, 5-9 are examined in this Office action.

*

An abstract is required, and does not appear to have been submitted.

*

The following is a quotation of the first paragraph of 35 U.S.C. §112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5-9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicants have asserted (p. 27) that they have subjected "the compounds of the invention" to *in vitro* assays, as described on page 27 (and references cited therein). Applicants have also asserted that "the compounds of the invention" were "active" in the assays. These assertions are left unchallenged at this time. To take it a step further, the examiner will stipulate that the following three claims are enabled:

> *A method of antagonizing an NK-2 receptor in a mammal in need thereof comprising contacting an NK-2 receptor with a compound according to claim 1 for a time and under conditions effective to antagonize an NK-2 receptor.*
>
> *A method of antagonizing an NK-2 receptor in a mammal afflicted with asthma comprising contacting an NK-2 receptor with a compound according to claim 1 for a time and under conditions effective to antagonize an NK-2 receptor.*
>
> *A method of antagonizing an NK-2 receptor in a mammal afflicted with an anxiety disorder comprising contacting an NK-2 receptor with a compound according to claim 1 for a time and under conditions effective to antagonize an NK-2 receptor.*

The claims recite the term "pharmaceutically acceptable salts", and/or "pharmaceutical compositions". These terms carry with them an implied assertion of therapeutic efficacy,

which is not in evidence. Merely because the asserted antagonism takes place *in vivo* does not mean that there exists a single disease or disorder for which benefit will accrue to a patient. The degree of antagonism might not be sufficient to achieve a perceptable effect; moreover, the NK-2 receptor might not be a critical element in any of the recited disorders, i.e., even if the NK-2 receptor could be blocked to the extent of 100% *in vivo*, it does not necessarily mean that the symptoms of any disease will recede. The compounds per se are not at issue; nor are the salts of the compounds at issue. Instead, it is those salts that are characterized as "pharmaceutically acceptable" that are the target of this rejection. It is suggested that the terms "pharmaceutically" and "pharmaceutical" be deleted from the claims. (This will actually result in an incremental increase in scope).

*

Claims 1-3, 5-9 are rejected under 35 U.S.C. §112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 1 recites (last two lines): **their** pharmaceutically acceptable salts. However, the word "their" in this situation introduces a degree of indefiniteness. Does this convey possession? It is suggested that the following phrase be used

  ...an acceptable salt thereof.

- Claim 1 (line 1) is drawn to "monocyclic compounds" in the plural. However, the singular would be better; the claim is really drawn to one compound at a time. Of

course, applicants can add a claim drawn to a mixture of two or more compounds.

The following is suggested for the last two lines of claim 1:

...R_3 and R_4 are not isopropyl;

or an acceptable salt or enantiomer thereof.

A claim such as the following could also be added, if deemed appropriate:

15. A mixture comprising two or more compounds according to claim 1

- Claim 1 employs the following phrase:

"... is a group chosen from among..."

The standard Markush Group language should be used, i.e.:

...wherein [variable X] is selected from the group consisting of A, B, C, D and E

*

The following is a quotation of 35 USC §103 which forms the basis for all obviousness rejections set forth in the Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.
>
> This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103,

the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made, absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

Claims 1-2 are rejected under 35 U.S.C. §103 as being unpatentable over Kitakabake (*Peptide Chemistry*, **17**, 7, 1980).

Kitakabake discloses the following compound: cyclo-Val-Val-Phe-Phe. The reference does not disclose any of the following:

cyclo-Leu-Val-Phe-Phe.

cyclo-Val-Leu-Phe-Phe.

cyclo-Ile-Val-Phe-Phe.

cyclo-Val-Ile-Phe-Phe

Were it not for the exclusion at the end of claim 1, the compound cyclo-Val-Val-Phe-Phe would be encompassed by instant claim 1, and the rejection could be justifiably applied under §102(b). Claim 1 excludes this particular compound; however, it does not exclude any of the four peptides listed above. These are peptides in which one conservative substitution has been made.

Thus, the claims are rendered obvious.

The "John Smith" reference was stricken from the IDS. The correct citation is presumably the following:

Harbeson, S. L.; Buck, S. H.; Malikayil, J. A., *Pept.: Chem. Biol., Proc. Am. Pept. Symp., 12th* (1992), Meeting Date 1991, 124-5. Editor(s): Smith, John A.; Rivier, Jean E.; Publisher: ESCOM, Leiden, Neth.

This may be found in *Chemical Abstracts* **117**:104416

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lukton. Phone: (703) 308-3213.

An inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

DAVID LUKTON
PATENT EXAMINER
GROUP 1800